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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,645	10/24/2003	Seong-Woo Ahn	45914	7616

7590 07/27/2006

Peter L. Kendall
Roylance, Abrams, Berdo & Goodman, L.L.P.
Suite 600
1300 19th Street, N.W.
Washington, DC 20036

EXAMINER	
NGUYEN, THUAN T	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/691,645	AHN ET AL.	
	Examiner	Art Unit	
	THUAN T. NGUYEN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luz et al. (U.S. Patent No. 6,321,073 B1) in view of Lee (US Patent Pub 2003/0068991 A1, previously cited in PTO-892).

Regarding claim 1, Luz discloses an apparatus for compensating the gain of an automatic gain controller (AGC) in a receiver incuding the AGC for controlling the gain of received packet data in a mobile communication system wherein packet data is discontinuously transmitted comprising a compensation controller performed the claimed function and a compensator for compensating the AGC value with the AGC compensation gain, thereby correcting errors generated in view of the nature of the AGC (refer to Fig. 3a & Fig. 3b, and col. 1/line 65 to col. 2/line 6 for the objective of Luz's system; col. 3/lines 25-55 and col. 4/lines 12-45 for the AGC controller within a radiotelephone, wherein the signals are CDMA signals, and CDMA signals are being considered as signals transmitted in packet data in discontinuously forms, refer to col.

1/lines 27-57 for background on CDMA and AGC circuits; Luz discloses compensation circuitry 202 with details on in-phrase compensation circuit and quadrature compensation circuit for I and Q within CDMA; and Fig. 2 is simply a broader view to easy realize the concept of AGC in a receiver for digital signals received).

Lutz does not show the AGC value is received from the AGC at the compensation controller as argued by the applicant; however, this feature is taught by Lee as Lee shows that an AGC value is received at a compensation circuitry for processing, not using a feedback loop as of Lutz, for transmission power enhancements and calibration AGC values (refer to Lee, Fig. 5 and page 3, par. 0050-0055). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lutz's apparatus with Lee's disclosed technique in calibration of AGC values at the compensation circuitry in order to calculate and calibration of AGC values for AGC compensation gain as required.

As for claim 2, Luz further discloses the AGC value being extracted at the start of the predetermined period and temporarily stored (col. 3/lines 48-55).

As for claim 3, Luz further discloses a timing controller, a sampler, a temporarily storage, a first subtractor and a first lookup table for performing the AGC compensation gain, comparing and outputting a stored value corresponding to the compensation gain (refer to Figs. 3a & 3b again, col. 3/line 25 to col. 4/line 12 and col. 5/lines 1-28 (clock rate or timing) for these features).

As for claims 4 and 7, Luz teaches this feature, refer to col. 3/lines 48-55 as a (digital) sample is pre-stored in the buffer memory comprised of one slot including a transmission unit of packet data or CDMA samples.

As for claim 5, Luz further discloses to include an offset compensator for compensating the power level of the compensated AGC value with an AGC compensation offset calculated in the compensation controller (col. 4/lines13-45 & col. 5/lines 5-21 for compensating the power level).

As for claim 6, this claim, a combination of claims 3 and 4, is disclosed by Luz, refer to claims 3-4 above.

As for claim 8, Luz teaches this feature as in addition to a first subtractor and first look-up table, Luz further includes a second subtractor 376 and a second look-up table 382 for obtaining the AGC compensation offset by outputting a stored value corresponding to the compensation offset (Fig. 3b, and col. 4/line 46 to col. 5/line 5).

As for claim 9, Luz further teaches this feature for estimating the energy of the compensated AGC value received from the compensator and normalized the estimated energy (col. 6/lines 7-22).

As for claims 10-16, these method claims are rejected in view of Lutz and Lee for the reasons given in the scope of claims 1-9 as discussed in details above, not limited to the cited paragraphs from the examiner but also to the entire teaching refernces of Lutz and Lee.

Conclusion

4. **Any response to this action should be mailed to:**
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to the New Central Fax number:

(571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Division or Art Unit 2618.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TONY T. NGUYEN
PATENT EXAMINER

Tony T. Nguyen
Art Unit 2618
July 21, 2006